

ES N 429 PAG 230

$Q(-3; -5)$ $r_Q \parallel r_{AB}$

$A(3; 2)$ $B(1; 1)$ r_{AB}

$m_Q = m_{AB}$ $m_{AB} = \frac{y_B - y_A}{x_B - x_A} = \frac{1 - 2}{1 - 3} = \frac{-1}{-2} = \frac{1}{2}$

$m_Q = \frac{1}{2}$ $Q(-3; -5)$

$y - y_Q = m_Q(x - x_Q)$

$y + 5 = \frac{1}{2}(x + 3)$

$y = \frac{1}{2}x + \frac{3}{2} - 5$

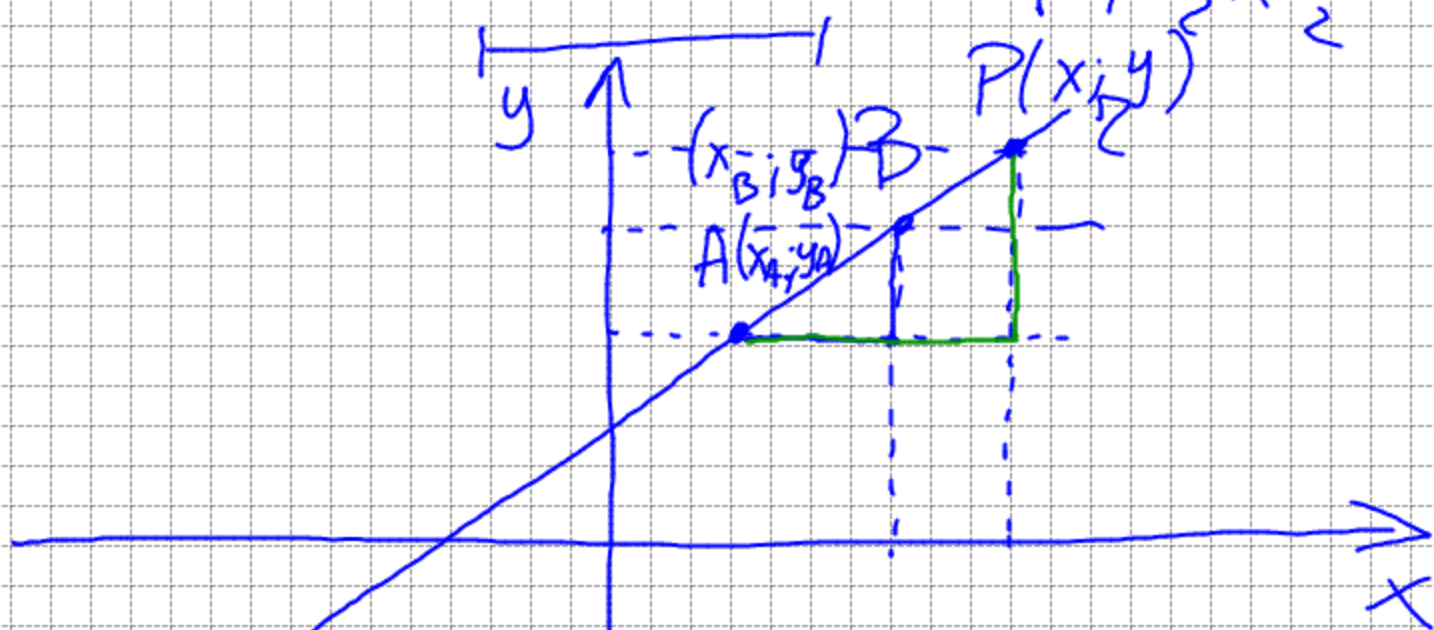
$y = \frac{1}{2}x - \frac{7}{2}$

$y = \frac{1}{2}x + 9$

$-5 = \frac{1}{2}(-3) + 9$

$9 = -5 + \frac{3}{2} = -\frac{7}{2}$

$y = \frac{1}{2}x - \frac{7}{2}$



$\frac{y_B - y_A}{x_B - x_A} = \frac{y - y_A}{x - x_A}$

$y - y_A = \frac{y_B - y_A}{x_B - x_A} (x - x_A)$

ES N 472 PAG 234

$r: (q+3)x + y - 2 = 0 \quad q \in \mathbb{R}$

1) \parallel one x

$q+3=0 \rightarrow q=-3$

2) \parallel one y

\neq

3) $r \cap y + x - 1 = 0$ in $P \in I$

$\begin{cases} (q+3)x + y - 2 = 0 \\ y + x - 1 = 0 \\ x_p > 0 \\ y_p > 0 \end{cases}$

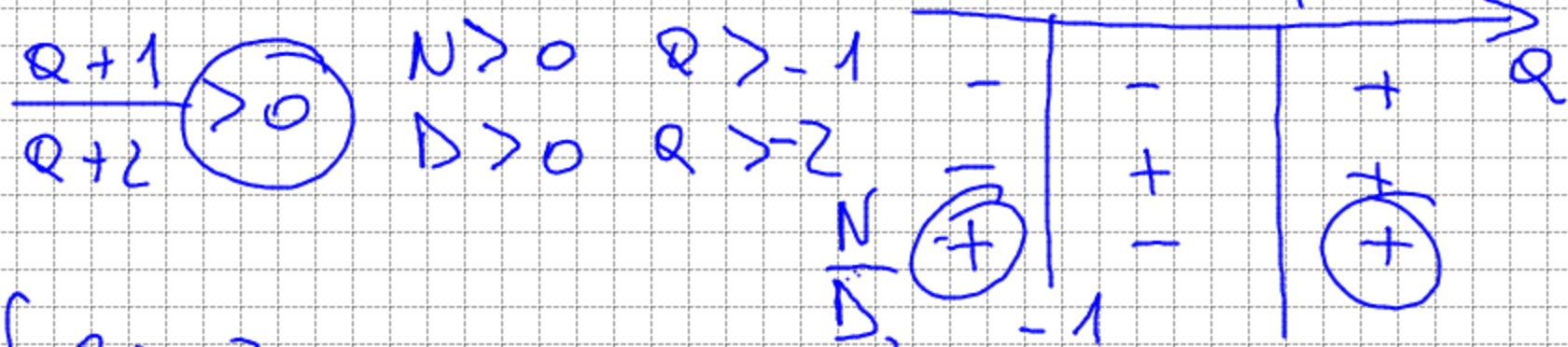
$\begin{cases} (q+3)x + y - 2 = 0 \\ x + y - 1 = 0 \\ x_p > 0 \\ y_p > 0 \end{cases}$

$\begin{cases} (q+3-1)x - 1 = 0 \\ x + y - 1 = 0 \\ x_p > 0 \\ y_p > 0 \end{cases}$

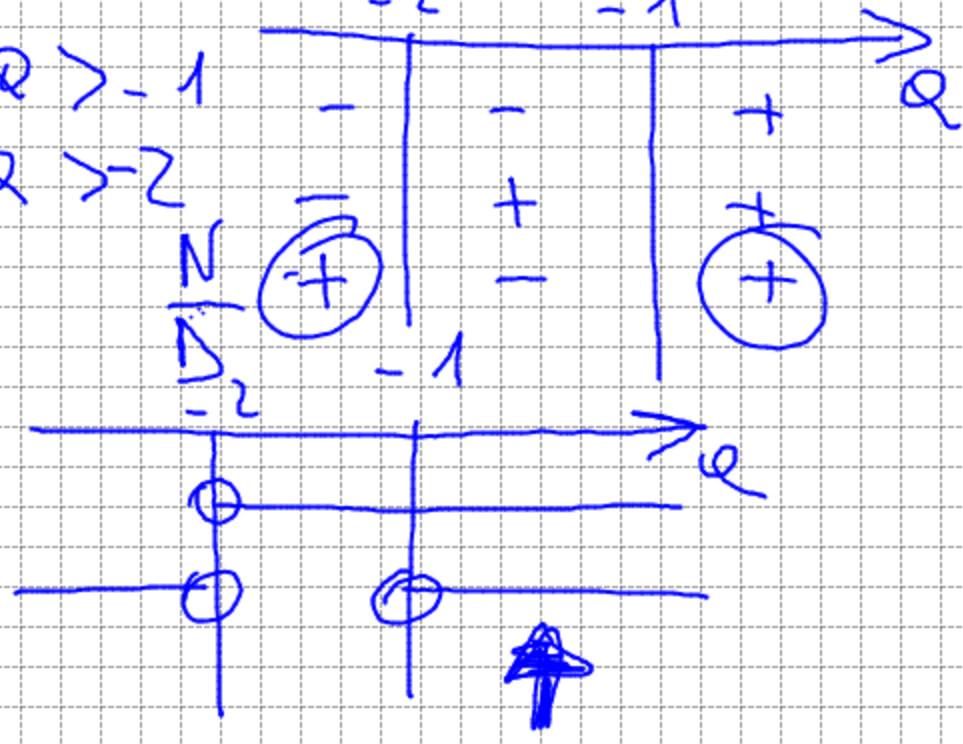
$\begin{cases} (q+2)x = 1 \\ x + y - 1 = 0 \\ x_p > 0 \\ y_p > 0 \end{cases}$

$\begin{cases} x = \frac{1}{q+2} > 0 \\ y = 1 - \frac{1}{q+2} > 0 \end{cases}$

$$\begin{cases} x = \frac{1}{q+2} > 0 \\ y = 1 - \frac{1}{q+2} > 0 \end{cases} \begin{cases} q > -2 \\ \frac{q+2-1}{q+2} > 0 \end{cases} \begin{cases} q > -2 \\ \frac{q+1}{q+2} > 0 \end{cases}$$



$$\begin{cases} q > -2 \\ q < -2 \cup q > -1 \end{cases}$$

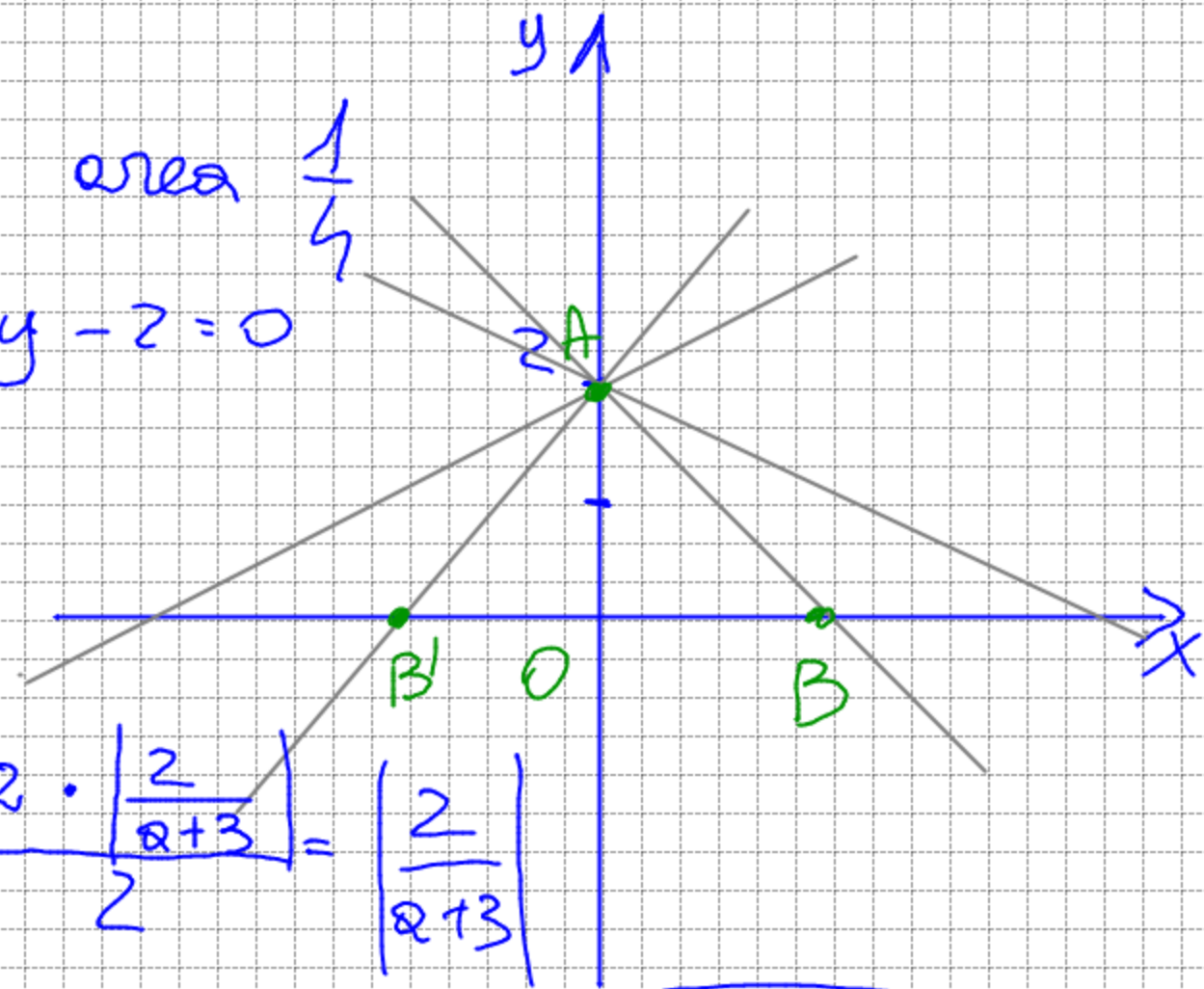


$$q > -1$$

4) Triangolo area $\frac{1}{4}$

$$(q+3)x + y - 2 = 0$$

$$y = -(q+3)x + 2$$



$$Q_{\text{TRIANGOLO}} = \frac{2 \cdot \left| \frac{2}{q+3} \right|}{2} = \left| \frac{2}{q+3} \right|$$

$$\left| \frac{2}{q+3} \right| = \frac{1}{4}$$

$$\frac{2}{|q+3|} = \frac{1}{4}$$

$$8 = |q+3|$$

$$q+3 = 8 \quad q = 5$$

$$q+3 = -8 \quad q = -11$$

$$q \neq -3$$